NATURAL RESOURCES CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

FACT SHEET

TEMPORARY EROSION CONTROL AROUND THE HOME FOLLOWING A FIRE

HYDROSEEDING AND HYDROMULCHING

What is it?

Hyrdoseeding is applying a slurry of water, wood fiber mulch, seed and fertilizer to prevent soil erosion and provide an environment conducive to plant growth. Hydromulching is applying a slurry of water, wood fiber mulch, and often a tackifier, to prevent soil erosion. These terms are often used interchangeably.

When is it used?

On steep, highly erosive slopes which have been partially or completely denuded of vegetation due to a land disturbance such as fire. This is a fairly expensive erosion control method which is often reserved for areas which are close to roads, bridges, homes and other structures. Use is often restricted due to lack of access roads and a nearby water supply. Slope lengths of 125 to 225 feet can be treated.

Methods and Materials:

A tank mounted truck equipped with a special pump and continuous agitation system is used. The pump forces the slurry through a top mounted discharge nozzle or discharge can be through 100 to 200 feet of hose. Tank capacities range from 1000 to 3000 gallons. Water is added first and then the wood fiber, tackifier (if used), fertilizer (if used), and seeds. Any coated seed would be loaded last. Legume seeds should be pellet inoculated with a special bacteria to stimulate the fixing of nitrogen. Seed should not be added to the slurry until immediately prior to beginning the operation and not remain in the tank more than 30 minutes.

Single application hydroseeding uses 1500 to 2000 pounds of wood fiber mulch per acre with the seed and fertilizer. Split application hydroseeding and hydromulching uses 500 pounds of wood fiber mulch per acre with the seed and fertilizer in the first pass followed by an application of 1500 to 2000 pounds of wood fiber mulch per acre and tackifier (if used). Most tackifiers are applied at 100 pounds of dry ingredients per acre.

Hydromulching using 500 to 1000 pounds of wood fiber mulch per acre and tackifier is often applied over loose, blown straw to tack it down. Hydromulching using 2000 to 3000 pounds of wood fiber mulch per acre and tackifier can be used for temporary protection where landscaping will be planted after the rainy season.

Wood fiber is usually dyed to aid in uniform distribution, but care should be taken to ensure that concrete or painted surfaces are not stained and that plants and animals are not injured. Wood fiber has natural tackifying properties but adding a tackifier should be considered on steep slopes.

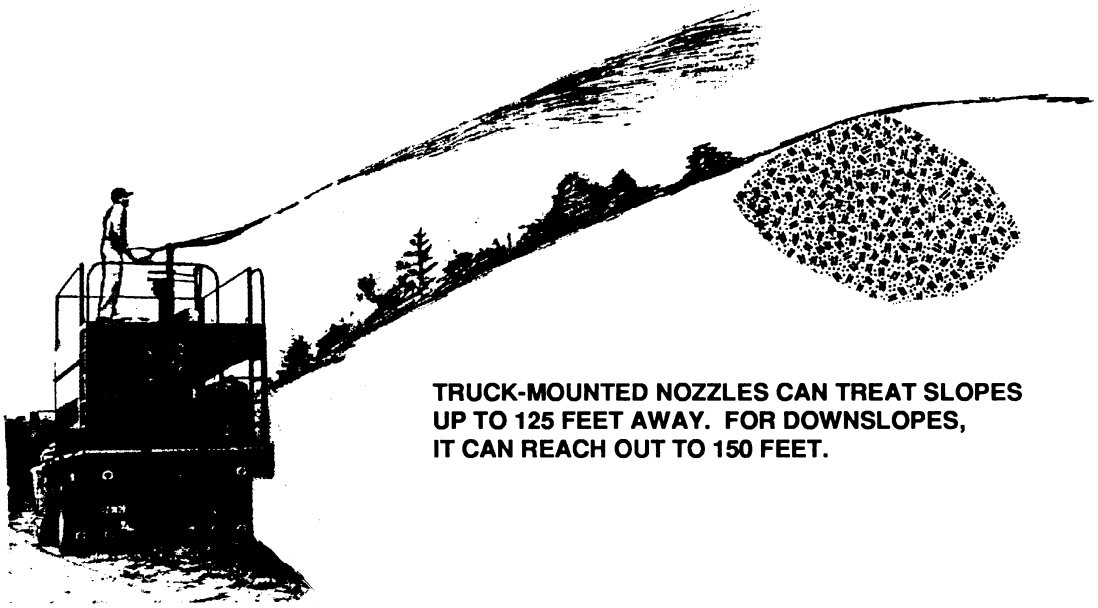
Seed Selection:

Seed and fertilizer recommendations are dependent upon the location of the area to be treated. Generally, one or two grasses and a legume like rose clover are used for these critical sites. California poppy, annual lupines, California buck-wheat, and other seed can be added to the mix.

Where to Get Help:

Technical assistance is available from your local USDA Natural Resources Conservation Service office or your local Resource Conservation District regarding the use of this practice and other treatments.

HYDROSEEDING AND HYDROMULCHING



TRUCK-MOUNTED NOZZLES CAN TREAT SLOPES UP TO 125 FEET AWAY. FOR DOWNSLOPES, IT CAN REACH OUT TO 150 FEET.

HYDROSEEDING
TANK MIX INCLUDES:
WATER, WOOD FIBER, SEED, FERTILIZER (OPTIONAL AFTER FIRES) AND TACKIFIER (OPTIONAL)

HYDROMULCHING
TANK MIX INCLUDES:
WATER, WOOD FIBER, AND TACKIFIER (OPTIONAL)

200 TO 225 FEET OF SLOPE CAN BE TREATED BY FIRST USING 100 TO 150 FEET OF HOSE PRESSURIZED BY THE TANK TRUCK.